

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

Claims 14, 15, 18 and 19 have been canceled. Claim 17 has been amended as supported by Claim 3 as originally filed.

The claims have been amended as supported by the claims and specification as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-13, 16 and 17 will now be active in this application.

The objection to Claims 14, 15, 18 and 19 is moot in view of the cancellation of these claims.

The rejection of Claim 19 is moot in view of the cancellation of Claim 19.

The rejection of Claims 1-19 as failing to comply with the written description requirement is obviated by the amendment of Claims and 1 and 3.

The rejection of the Claim 17 as being indefinite is obviated by the amendment of Claim 17.

The present invention as set forth in **amended Claim 1** relates to a process for producing foamable crosslinked polymers, comprising:

polymerizing a mixture comprising

- (A) 30-70 parts by weight of methacrylic acid,
30-60 parts by weight of methacrylonitrile,
0-30 parts by weight of other monomers having vinyl unsaturation,
- (B) 0.01-15 parts by weight of tert-butyl methacrylate,
- (C) 0.01-10 parts by weight of blowing agent,
- (D) 0.01-10 parts by weight of crosslinking agent,
- (E) 0.01 to 2 parts by weight of polymerization initiators and
- (F) 0 to 20 parts by weight of conventional additives

in bulk to give a sheet;

wherein said sheet is optionally subjected to the following treatment:

heat-conditioning and then foaming at temperatures of from 150 to 250°C.

Amended Claim 3 relates to a foamable crosslinked polymer comprising

- (A) 30-70 parts by weight of methacrylic acid,
30-60 parts by weight of methacrylonitrile,
0-30 parts by weight of other monomers having vinyl unsaturation,
- (B) 0.01-15 parts by weight of tert-butyl methacrylate,
- (C) 0.01-10 parts by weight of blowing agent,
- (D) 0.01-10 parts by weight of crosslinking agent,
- (E) 0.01 to 2 parts by weight of polymerization initiators and
- (F) 0 to 20 parts by weight of conventional additives.

The remaining claims are dependent claims.

Geyer does not disclose the use of t-butyl (meth)acrylate. Tada discloses the use of large amounts of 5 to 50% the weight of t-butyl (meth)acrylate.

The secondary reference does not recognize that amounts between 0.01 and 15 parts by weight give foams with good thermo-mechanical properties and extremely fine and uniform pore structure. See page 9, lines 22-26, page 9, lines 28-39 of the specification, as well as the examples starting at page 14.

Col. 4 of Geyer which discloses generally the use of esters of methacrylic acid of C1-4 alcohols up to 20 wt%. However, the specific use of t-bu-methacrylate is not mentioned or exemplified. The 7th Example from the top of table 1 of Tada uses 10 parts of TBMA. It would NOT have been obvious to use 10 parts of TBMA in Geyer. Applicants refer to the above-mentioned disclosure at page 9 which mentions superior thermo-mechanical properties. Table 4 also provides mechanical properties.

Moreover, TBMA and TBA are comparable and it is therefore believed that additional comparative data are not necessary.

Furthermore, please be informed that the corresponding EP patent has been granted under EP 1678244 B1 with TBMA and TBA.

However, in Claims 14 and 15, there is no TBA in component (B).

Tada et al, Stein, Wu, Zacharopoulos, Nieuwendijk and Baumann do not cure the defects of Geyer et al.

Further, the Examiner has addressed the previous arguments regarding the prior art rejections at pages 7-8 of the Office Action. From the discussion, it appears that the Examiner still does not accept the data in the specification as being commensurate in scope

with the claims. He previously noted that the maximum amount of TBMA is 15 parts by weight, and therefore, he does not find a comparison between 10 parts by weight and 20 parts by weight (Examples 6 and 7) to be commensurate in scope with what is claimed.

With regard to Example 7 it is noted that the indication “a)” after the “7” refers to the footnote below the table at page 15 of the specification. There it is described that the product of example 7 was a “very brittle foam, difficult to machine”. Thus, Example 7 is a comparative example just like comparative example 8 with an unfavourable product.

Thus, with respect to the amount of TBMA, Examples 2-6 in table 2 at page 15 of the specification are within the scope of the present invention. Examples 1, 7 and 8 are outside.

A comparison of the examples according to the present invention with Example 8 shows that superior mechanical properties were obtained when the amount of TBMA is within the claimed range. See Table 4 bridging pages 16 and 17 of the specification.

Therefore, the rejection of the claims under 35 U.S.C. § 103(a) over Geyer et al, in view of Tada et al, Stein, Wu, Zacharopoulos, Nieuwendijk and Baumann are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.


Respectfully submitted,

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